TECHNICAL MEMORANDUM

Utah Coal Regulatory Program

July 1, 2009

TO:

Internal File

THRU:

James Smith, Permit Supervisor

775 07/21/09 Ingrid Wieser, Senior Environmental Scientist, Lead

FROM:

David Darby, Senior Environmental Scientist, Geo/Hydro.

RE:

Permit Area Expansion-Lease UTU-78562, West Ridge Resources, Inc.,

C/007/0041, Task ID #3294

SUMMARY:

On May 14, 2009 West Ridge Resources Inc., submitted an amendment to increase the size of the permit area by 602.91 acres.

DEFICIENCIES

None

TECHNICAL ANALYSIS:

ENVIRONMENTAL RESOURCE INFORMATION

Regulatory Reference: Pub. L 95-87 Sections 507(b), 508(a), and 516(b); 30 CFR 783., et. al.

PERMIT AREA

Regulatory Requirements: 30 CFR 783.12; R645-301-521.

Analysis:

The lease addition will take place in sections 34, 35 of T. 13S, R. 13 E.; Section 1 in T. 14 S., R 13 E.; and Section 6 in T.14 S., R 14 E., SLB. The permit area and lease areas are

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shown on Map 1-0 of the amendment submittal. Most of the surface land in the amended area is fee property, except for a quarter-quarter section that belongs to the BLM, Map 5-2.

Findings:

The Permittee has addressed the minimum requirements of the Permit Area Section of the regulations.

GEOLOGIC RESOURCE INFORMATION

Regulatory Reference: 30 CFR 784.22; R645-301-623, -301-724.

Analysis:

A description of the geology is provided in Section 6, Volume 3 of the MRP. Mining will take place in the lower Sunnyside coal seam of the Blackhawk Formation. The coal seam structure map, Map 6-2 shows the dip of the coal seam to be 13 degrees to the northeast. The subsidence map, Map 5-7, shows future mining will take place down dip under 1800 feet in Whitmore Canyon near Grassy Trail Reservoir to over 3000 feet in the permit addition area. The regional geology map, Map 6-2 shows the stratigraphy in and adjacent to the permit area.

A perennial stream flows down Whitmore Canyon to Grassy Trail Reservoir, which lies outside the permit area. A major portion of Whitmore Canyon lies within the permit area, Map 4-1. The stream bifurcates, the northern fork identified as Spring Canyon, about two-thirds the way into the permit area from Grassy trail reservoir. Map 7-5 shows the seeps and springs on and adjacent to the permit area. Several sites are located along Whitmore Canyon. Overburden along Whitmore Canyon is relatively thick ranging from about 1800 feet to well over 3000 feet. Coal thickness ranges from 9 feet to 6 feet under Whitmore Canyon. The ratio of coal to overburden is exceptionally high. The thickness of overburden should provide a good buffer to prevent subsidence related impacts.

Coal quality of the strata and coal seam to be mined is presented in Appendix 6-1. Analyses of the rock strata indicate that the potential for acid and /or toxic-forming material is minimal. Appendix 6-1 also contains lithologic cross-sections of all coal seams in the area of the mine.

Findings:

The information provided by the Permittee meets the minimum requirements of the Environmental Resource Information – Geologic Resources Information section of the regulations.

OPERATION PLAN

COAL RECOVERY

Regulatory Reference: 30 CFR 817.59; R645-301-522.

Analysis:

Maps have been supplied showing to areas of projected mining. West Ridge plans to expand operations under deep cover to access coal that otherwise would not be mined. Large barrier panels will be left between longwall panels, which should provide the support needed for safe operations under the high amount of cover.

Findings:

The Permittee has submitted sufficient information to address the minimum requirements of the Coal recovery regulations.

Recommendation:

This amendment is recommended for approved.

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